



GOES DATA COLLECTION SYSTEM (DCS)

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NOAA SATELLITES AND INFORMATION

OFFICE OF SATELLITE DATA PROCESSING AND DISTRIBUTION



GOES DCS USERS

- Flood Monitoring
 - United States Geological Survey Water Resources Divison
 - U.S. Army Corps of Engineers
 - NOAA National Weather Service River Forecast Offices.



GOES DCS USERS (CONT)

■ Fire Monitoring

- U.S. Forest Service
- National Interagency Fire Center
- Canadian and State Fire Agencies

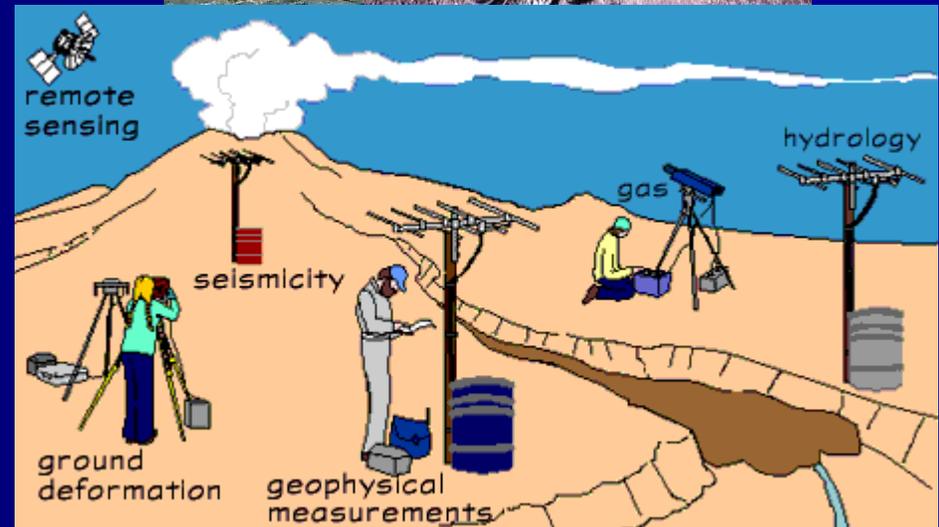
■ Land Management

- Bureau of Land Management



GOES DCS USERS (CONT)

- Geologic Event Monitoring
 - United States Geological Survey Geologic Division
 - Earthquake Monitoring, Volcano Monitoring
 - NOAA/NWS/Tsunami Warning Center
- Oceanographic Users
 - NOAA National Ocean Survey



GOES DCS USERS (CONT)

- Resource Management
 - National, State, and Local Water Resource Managers
- Meteorological Users
 - U.S. National Weather Service
 - International Hydromet Service facilities
 - Central America, South America, Pacific Islands, Mexico, Canada



SYSTEM USAGE ELIGIBILITY

- GOVERNMENT USER
 - FEDERAL, STATE, LOCAL
INTERNATIONAL.
- ENVIRONMENTAL MEASUREMENT
DATA
- DATA OF INTEREST TO GOVERNMENT
ENTITIES
- DATA SHARED WITH OTHER
GOVERNMENT USERS.

BENEFITS

- Low-Cost
- Low-Maintenance
- Emergency Event-Driven Capability
- Ideal for Remote Locations
- Data Easily Shared Among Government Users

DRAWBACKS

- Finite Capacity (Approximately 133 Domestic Self-Timed Channels)
- Scheduled Transmissions based on Channel/Time Availability
- Interference Detection Difficult
- Troubleshooting capabilities Minimal

GEOGRAPHIC DISTRIBUTION

- 26,000 TRANSMITTERS SYSTEM-WIDE
 - 4,000 IN LATIN AMERICA
 - 3,000 IN CANADA, PACIFIC AND ATLANTIC
 - 19,000 IN U.S.

HIGH DATA RATE

- TRANSMITTERS OPERATING AT 3 DATA RATES
 - 100 BPS
 - MUST BE PHASED OUT BY 2013
 - 300 BPS
 - WILL BECOME STANDARD
 - MOST NEW ASSIGNMENTS ARE 300 BPS
 - 1200 BPS
 - BY SPECIAL PERMISSION ONLY

TRANSMIT PARAMETERS

- MOST NEW TRANSMITTERS HOURLY
- STANDARD DURATION IS 5 SECONDS TO 15 SECONDS
 - BETWEEN 4 AND 12 SEPARATE TRANSMISSIONS PER **MINUTE** PER CHANNEL!!!

MAINTENANCE RESPONSIBILITIES

- KEEPING CLOCKS ACCURATE IS ABSOLUTELY CRITICAL!!!
 - Recommend GPS chips for accurate timing.
 - Batteries should be kept charged!!!
 - Requires regular maintenance visits.
- A Transmitter out of it's time slot may cause several users to lose data...
 - Including you!!!
 - NO ONE IS HAPPY 

MAINTENANCE RESPONSIBILITIES

- KEEPING CONTACT INFORMATION UP TO DATE IS ESSENTIAL!!!
 - MAINTENANCE CONTACTS FOR PLATFORMS
 - USER CONTACTS FOR NETWORKS

• WHO DO WE CALL IN THE MIDDLE OF THE NIGHT IF THINGS GO WRONG???



DISCUSSION POINTS

- What is the biggest obstacle to maintaining your networks?
- Do you build maintenance into your development costs?
- How do we maintain contact with your agencies if you change jobs? Do you have documentation of your networks ready to hand off to someone new?
- How can NOAA help you with that documentation?

CONTACT US

- <http://noaasis.noaa.gov/DCS>
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